

OZEROV, B.; SHTERNAL', A., starshiy prepodavatel' (Leningrad)

How the Leningrad Branch of the Institute of Technical Education
conducts training in schools of progressive practices. Zhil.-kom.
khoz. 10 no.5:28-30 '60. (MIRA 13:10)

1. Direktor Leningradskogo filiala Instituta tekhnicheskogo
obucheniya (for Ozerov).
(Leningrad—Technical education)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6

SHTERENTAL', A.I. (Moskva)

Promoting independent work by students of a physics class.
Fiz. v shkole 21 no.1:75-79 Ja-F '61. (MIFI A 14:9)
(Physics--Study and teaching)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6"

ROSTAPSHOV, M.V. SHTERENTAL', I.V.

Suction of films and mucus from the respiratory passages after
tracheotomy in diffuse croup. Pediatriia no.2:48-50 '62.
(MIRA 15:3)

1. Iz 2-y infektsionnoy bol'nitsy Zaporozh'ya (glavnnyy vrach
O.P. Podionova).
(CROUP) (TRACHEA--SURGERY)

L 1465-66

ACCESSION NR: AP5012837

UR/0348/65/000/004/0034/0035

632.934.1

44,55

AUTHOR: Gubarev, M. ^{44,55} (Section chief); Shterenthal', M. ^{44,55} (Group head)

20
17
B

TITLE: Criteria for evaluating aerosol spraying

SOURCE: Zashchita rasteniy ot vrediteley i bolezney, no. 4, 1965, 34-35

TOPIC TAGS: agriculture, ^{44,55} aerosol, atomization

ABSTRACT: The authors discuss the concept of the degree of dispersion, define the average drop diameter d_k , describe methods for determining the average drop size of aerosols microscopically, and discuss the relationship between d_k and the area which can be covered by a unit volume of spray. It is pointed out that the average drop diameter from standard sprayers is 300–400 μ , and that a smaller d_k would not only provide better coverage and greater economy, but would also permit a wider area to be sprayed and provide better distribution of spray on the leaf. Normally, d_k is related in a simple way to the degree of coverage of the leaf surface; with fine droplet sprays, however, better effectiveness can be attained with a lower degree of coverage; hence, new criteria are needed for evaluating the effectiveness of such sprays. The zone of biocidal effect is defined, as well as the coefficient of effective action of the drop, which increases as the drop size decreases. The

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concept of the "degree of effective coverage," is advanced. It is given by

$$M_{ef} = \frac{25\pi}{f_0} \sum d_{efi}^2 n_i$$

where f_0 is the field of view of the microscope used to determine the drop size, d_{ef} is the effective diameter of the drop, and n_i is the number of drops. Orig. art. has: 1 figure, 1 table, and 5 formulas.

ASSOCIATION: GSKV po mashinam dlya khimicheskoy zashchity rasteniy L'vovskogo sovnarkhoza (GSKV for Machines for Chemical Plant Protection, L'vov Economic Council)

SUBMITTED: 00

NO REF SOV: 000

445 SUB CODE: GC, IS

ENCL: 00

OTHER: 000

Card 2/2

L 43731-66 EWT(1) RC

ACC NR: AP6026374

SOURCE CODE: UR/0433/66/000/00770000

27

B

AUTHOR: Sudit, Zh. (Sector chief); Shterental', M. (Group leader)

ORG: State Special Design Bureau for Machinery for the Chemical Protection of Plants (GSKB po mashinam dlya khimicheskoy zashchity rasteniy, L'vov)

TITLE: Design recommendations for modern aerosol generators

SOURCE: Zashchita rasteniy, no. 7, 1966, 23-26

TOPIC TAGS: aerosol, aerosol generator, plant disease control, agricultural machinery

ABSTRACT: The advantages and disadvantages of several types of aerosol generators, produced in the Soviet Union and elsewhere, are described and compared. Their specifications are presented in Table 1. Schematic diagrams are given showing the operation of generators of the AG-UD-2 and PAG-I types, of the AOSh-8, GBA-25, and OAN-II types, and of the TIFA-40E. Based on the operational insufficiencies of these current models, a number of suggestions are made for the design of future aerosol generators. They are: 1) The generator must be designed for the specific purpose for which it is intended. This will determine its optimal output, its layout, and its working processes. 2) The combus-

UDC: 632.982.005

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Table 1. Characteristics of aerosol generators.

Generator	Liquid consumption (output) (l/min)	Weight (kg)	Power (hp)	Specific weight-to-output ratio ($\frac{\text{kg}}{\text{l/min}}$)	Specific power-to-output ratio ($\frac{\text{kg}}{\text{l/min}}$)
AG-UD-2* ¹⁶	5.5	250	8	45.5	1.5
AOSh-8* ²⁴	7.7	285	10	37	1.3
GBA-25* ²⁴	22.0	780	30	35.4	1.3
DAN-II* ²⁴	11.7	300	11	25.6	0.9
PAG-I**	6.0	264	9	43.9	1.5
TIFA-40E***	4.0	272	6.5	68	1.1

*SSSR **Czech ***USA

tion chamber must have good flameout characteristics, a high combustion coefficient, and good stability of combustion processes. An air current divided into two parts, with introduction of the processes. An air current along the length of the chamber, is recommended. 3) A gas flow must be generated in the combustion chamber having sufficient kinetic energy for good atomization of the working liquid when it enters the evaporative nozzle. 4) The fuel and working liquid must be fed into the

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ACC NR: AP6026374

combustion chamber under pressure. 5) Regulation of the degree of evaporation and dispersion, and control gages should be provided. 6) The sprayer must be designed for a standard mounting. It is desirable that the generator's mechanism be driven by power from the tractor's engine. 7) To improve the quality of the technical process, and to broaden the assortment of toxic chemicals applied, the reservoir should be equipped with mixing devices. 8) The sprayer should be self-filling. 9) The design of the generator should provide for the production of aerosols by mechanical means. 10) The aerosol sprayer must have minimum specific weight-to-output and power-to-output ratios. [Note: the article mentions an AOSH-8 and an OASH-8 generator. They are evidently the same.] [EL]

SUB CODE: 13, 06 / SUBM DATE: none/

Card 3/3

JS

SHTERENZON, A.L.; LOBANOV, Yu.Ye.; Prinimala uchastiye: BURYKINA, Ye.F.

Water and corrosion resistance of fluoroplast coatings. (MIRA 16:1)
Lakokras.mat.i ikh prim. no.6:37-39 '62.

1. Ural'skiy nauchno-issledovatel'skiy khimicheskiy institut.
(Protective coatings--Testing)

L 8921-65 EPA(s)-2/EWT(m)/EPF(c)/EPR/EWP(j)/T Pg.1/Pt-4/Ps-4/Pt-10 RPL
ACCESSION NR: AP4045434 RWH/WW/RM S/0190/64/006/009/1668/1675

AUTHOR: Shterenzon, A. L.; Lobanov, Yu. Ya.; Konovalova, S. P.

TITLE: Penetration of Ftorlon with concentrated electrolyte solu^{tions}

FROM:

SOURCE: Vy*skomolekulyarnyye soyedineniya, v. 6, no. 9, 1964,
1668-1675

TOPIC TAGS: Ftorlon polymer, polymer film, corrosion preventing film, polymer permeability, concentrated electrolyte penetration, polymer penetration factor

ABSTRACT: Ftorlon, a copolymer of tetrafluoroethylene and vinylidene fluoride, has been evaluated as a corrosion-resisting film in very aggressive electrolyte solutions such as concentrated H_2SO_4 , H_3PO_4 , KNO_3 , KCl , HCl , HNO_3 , NH_3 , and CH_3COOH , at 42-50°C. In the absence of a satisfactory explanation for the sharp differences in permeability of a given polymer with various electrolytes, an attempt was made to explain the mechanism of penetration of a chemically

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ACCESSION NR: AP4045434

stable polymer. Electrical conductivity measurements made it possible to calculate the penetration factor and hence the permeability of a fluoron film. The absence of penetration of nonvolatile electrolytes, such as H_2SO_4 , H_3PO_4 , and salts, and the relatively high permeability of the film to volatile electrolytes (HCl , HNO_3), were established. This difference in permeability is explained in terms of a difference in sorption of the electrolytes on a polymer, which is determined by the work function of the electrolyte molecules from aqueous solution. The mechanism of penetration of non-swelling polymers with a low dielectric constant is similar for both electrolytes and gases and vapors, since the electrolytes are believed to be undissociated in such polymers. The near-exponential concentration dependence of the penetration factor was established with volatile electrolytes and was ascribed to the similar character of the change in electrolyte activity in aqueous solution with a change in concentration. Orig. art. has: 3 figures and 16 formulas.

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L 8922-65

ACCESSION NR: AP4045434

ASSOCIATION: Ural'skiy nauchno-issledovatel'skiy khimicheskiy in-
stitut, Sverdlovsk (Ural Scientific Research Institute of Chemistry)

SUBMITTED: 13Nov63

ATD PRESSI 3110 ENCL: 00

NO REV SOV: 017 OTHER: 010

SUB CODE: MT

Card 3/3

I 40991-65 EWT(m)/EPF(c)/EWA(d)/EPR/T/EWP(t)/EWP(b)/EWP(j) Pc-4/Pr-4/Ps-4
JD/WW/WB/RM 8/0191/65/000/003/0053/0055 39
ACCESSION NR: AP5006565 31
B

AUTHOR: Shterenzon, A. L.; Stavnitser, I. I.

TITLE: Coating of parts with polychlorotrifluoroethylene (Kel-F) in a "boiling" layer

SOURCE: Plasticheskiye massy, no. 3, 1965, 53-55

TOPIC TAGS: polychlorotrifluoroethylene, fluoroplast, polymer coating, boiling layer, metal coating, spray dusting, steel corrosion, corrosion prevention, graphite filler / Kel-F polymer

ABSTRACT: The authors studied the conditions under which Kel-F (Fluoroplast-3) could be used for coating metallic surfaces by applying the spray-dusting technique. Cylindrical steel samples 10 mm in diameter, pretreated with sand and heated to 270-350°C, were immersed for 5-40 sec. into finely sieved Kel F dust which had been dried at 110-120°C in a Schott filter No. 2 and was then brought to uniform "boiling" by pressurized air; the operation was repeated after the previous layer in a constant temperature bath at 270°C to obtain the required combined thickness. Coated samples were kept for 10 hrs. at 270°C and quenched in

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I. 40991-65
ACCESSION NR: AP5006565

water to harden the coatings. 350 μ thick Kel-F coatings preserved adhesion to metal and showed no visible change after treatment at 80C with concentrated H₂SO₄ for 600 hrs. Quality coatings were also obtained by this technique from Kel-F with up to 10% electrode graphite filler; some industrial applications of the technique are mentioned briefly. Orig. art. has: 2 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, IE

NO REF Sov: 000

OTHER: 000

Card

fs
2/2

SHTERENZON, A.L., inzh.; MOISEYEVA, V.P., inzh.

Controlling the corrosion of large containers using two materials,
namely, fluoroplast 3 + glass cloth. Khim.i neft. mashinostr.
no.8:25-27 Ag '65. (MIRA 18:12)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6

NIKITIN, S.S., inzh.; SHTERENZON, M.D., inzh.

Precision of making precast reinforced concrete columns on stands
has been increased. Prom.stroi. 38 no.2:31-32 '60.
(MIRA 13:5)

(Columns, Concrete)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6

AVRAKOV, N., SHTAREV, A.; VICHEN, St.

Simplified protective relay for average voltage networks. Godishnik
nauchnaya elektronika 13 no.2;1971-196 '63 [publ. '64]

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6"

SHTEREV, Kostadin, inzh.

Spontaneous carbon dioxide from Bulgarian carbonic mineral
springs, and its industrial use. Khidrotekh i melior 8
no. 10:314-315 '63.

SHEREV, Kostadin D., inzh.-khidrogeolog, n. sutr.

Distribution and utilization of carbon dioxide mineral
waters in Bulgaria. Priroda Bulg 12 no. 4: 26-34 Jl-Ag '63.

1. Nauchnoizsledovatelski institut po kurortologija i
fizioterpiia.

*

SHTREK, M.

Motion-picture amplifier to determine the nominal power of the amplifier. p. 54.
How to measure intensity which is greater than the circumference of the voltmeter. p. 55.

Vol. 4, no. 7/8, 1955
RADIO
Sofiya, Bulgaria

Do: Eastern European Accession Vol. 5 No. 4 April 1956

SHTEREV, M.

Rules for changing radio tubes. p. 21.
Repairing variable condensers. p.24.

RADIO. Vol. 5, no. 2, 1956

Sofia, Bulgaria

SOURCE: East European Accessions List (EEAL) Library of
Congress, Vol. 6, No. 1, January 1957

SHTEREV, P.

A case of typhoid fever with vesico-puspolous roseola. Suvrem med.,
Sofia no.7-8:172-174 '60.

1. Iz Katedrata po infektsiozni bolesti i epidemiologii pri VMI,
Sofia (Rykov. na katedrata prof. P.Verbsv)
(TYPHOID compl)

VERBEV, P.; TANEV, I.; ZHELIAZKOV, S.; SHTEREV, P.; SELEKTAR, A.; KHAITOV, A.

Epidemiological role of various conditions and duration of hospitalization
in the treatment of scarlet fever. Nauch. tr. vissch. med. inst.
Sofia 40 no.2:139-153 '61.

1. Predstavena ot prof. P. Verbev, rukovoditel na Katedrata po epidemiologija i infektsiozni bolesti.

(SCARLET FEVER ther)

PELOV, Venelin; SHTEREVA, Rada

Daily and seasonal dynamics of some pests of alfalfa
during its full blossoming. Pt.2. Zashchita rastenij
2 no.7: 95-201 '63.

KEVORKIIAN, Agol, dots. d-r inzh.; SHIEREV, Vichko, inzh.

Influence of the direction and number of throwing twists on
some basic properties of worsted yarns. Tekstilna prom 12
no. 6:8-13 '63.

TEMKOV, Iv.; BOIADZHIEVA, M.; SHTEREVA, T.

Changes in the cholinesterase activity of the blood serum in some psychoses under the influence of mivaline. Nauch. tr. vissh. med. inst. Sofia 39 no.6:105-114 '60.

1. Predstavena ot prof. G. Uzunov, rukovoditel na Katedrata po psikiatriia.

(ALKALOIDS ther) (PARASYMPATHOMIMETICS ther)
(CHOLINESTERASE blood)

SHTEREVA, T.

Content of free amino acids in penicillin-resistant staphylococci. Nauch. tr. vissh. med. inst. Sofiia 42 no.5:57-62 '63.

1. Iz kruzhok po biokhimiiia; nauchen rukovoditel: dr. G.K.Saev [deceased].

*

BOBOV, V.; YANOVICH, R. (Leningrad); VAYNSHTEYN, L. (Khar'kov);
KHUSAINOVA, Kh.; KOCHUROV, V.; SHTEREVERYA, G., gornyy inzhener-
ekonomist; LYUBOMIRSKIY, A.; MALEKOV, V., normirovshchik
(g. Noril'sk); VORONICH, V., normirovchik; POPOV, V.

From the editor's mail. Sots. trud 8 no.5:127-130 My '63.
(MIRA 16:6)

1. Predsedatel' byuro ekonomicheskogo analiza Dushanbinskogo
myasokonservnogo kombinata (for Khusainova). 2. Vladimirskiy
zavod "Avtopribor" (for Kochurov). 3. Shakhta No. 39, Donetskiy
Basseyn (for Shtereverya). 4. Nachal'nik otdela TSelinnoy
krayevoy planovoy komissii (for Lyubomirskiy). 5. Zamestitel'
nachal'nika Bereznikovskoy gorodskoy kontory svyazi (for Popov).

(Industrial management)
(Wage payment systems)

SHTERIN, M.A.; GORELIK, G.N.

Method of ion exchange in the purification of waste waters from
the manufacture of zinc and lead chromates. Report 2. Lakokras.
mat.i ikh prim. no.1:41-46 '61. (MIRA 14:4)
(Sewage--Purification) (Ion exchange)
(Zinc chromate) (Lead chromate)

SHTERK, M.D.

Analysis of transistor circuits using a generalized network
current method. Radiotekhnika 20 no.11:2-10 N '65.
(MIRA 18:11)

1. Deystvitel'nyy chlen Nauchno-tekhnicheskogo obshchestva
radiotekhniki i elektrosvyazi imeni A.S.Popova. Submitted
August 9, 1963.

I 52992-65 EWT(1)/EWA(h) Feb

ACCESSION NR AM5001001

BOOK EXPLOITATION

S/ 24
B+1

Tishenko, I. M.; Lebedev, B. N.; Shterk, M. D.; Klimushov, B. IA.; Fedorin, A. A.; Egorychev, V. I.

Calculation and design of pulse devices in transistors (Raschet i proyektirovaniye impul'snykh ustroystv na tranzistorakh), Moscow, Izd-vo "Sovetskoye radio", 1964, 516 p. illus., bibliog. 41,000 copies printed.

TOPIC TAGS: transistor, multivibrator, trigger, pulse generator, video amplifier, transistorized key, electronics

PURPOSE AND COVERAGE: This book presents problems in the calculation and design of transistorized pulse equipment—multivibrators, triggers, sawtooth voltage generators, time delay, voltage converters, and pulse video amplifiers. The book is intended for radio engineers concerned with the design of transistorized radio equipment; it can also be useful to students in radio electronic higher educational institutions.

TABLE OF CONTENTS (abridged):

Foreword — 3

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ACCESSION NR AM5001001

Ch. I. Properties and parameters of a transistorized key — 17
Ch. II. Multivibrators — 75
Ch. III. Triggers — 152
Ch. IV. Sawtooth voltage generators — 230
Ch. V. Time delay voltage converters — 349
Ch. VI. Sawtooth current generators — 389
Ch. VII. Pulse video amplifiers — 496
Bibliography — 560

SUBMITTED: 29 Feb 64

SUB CODE: EC

NO REF Sov: 069

OTHER: 025

Card 2/2

YUGOSLAVIA / Diseases of Farm Animals. Diseases
Caused by Bacteria and Fungi,

R-1

Acq Jour: Ref Zhur-Biol., No 2, 1958, 7302

Author : Vladimir Shterk

Inst : Not given

Title : Treatment of Hoof Rot of Sheep with Picric Acid

Orig Pub: Zb. radova Pol'oprivrednog. fak. Un-t Beogradu,
1956, 4, No 1, 155-160 (Serbo-Khorv; rez: angl.)

Abstract: A 15 percent picric acid methyl alcohol solution was used. In the flock 1164 extremities of 468 sheep were affected. Recovery followed in 906 cases after one or two applications, in 108 after three applications, and in 150 - after four. The author considers that picric acid has the same curative effect as "chloramphenicol." During cold weather, the solution of picric acid must be

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"APPROVED FOR RELEASE: 07/13/2001

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SHTERLING, S. Z.

DECEASED

1964

c. 1958

Welding

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6"

SHTERMAN, L.Ya.

Relation between the size and the degree of osmoregulatory development in fishes of the same age. Nauch. dokl. vys. shkoly; biol. nauki no.2:76-79 '61. (MIRA 14:5)

1. Rekomendovana kafedroy zoologii Leningradskogo pedagogicheskogo instituta.
(FISHES—PHYSIOLOGY)

GORDIYEVSKIY, A.V.; FILIPPOV, E.L.; SHTERMAN, V.S.

Use of the ion exchange membrane electrode for measuring LiCl
concentration in amyl alcohol. Zhur. fiz. khim. 38 no.5;
1344-1347 My '64. (MIRA 18:12)

1. Khimiko-tehnologicheskiy institut imeni Mendelyeva.
Submitted July 4, 1963.

GORDIYEVSKIY, A.V.; FILIPPOV, E.L.; SHTERMAN, V.S.

Use of ion-exchange membranes for the control and regulation
of concentrations of some complexons. Zhur. anal. khim. 19
no.3:282-285 '64. (MIRA 17:9)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni
Mendeleyeva.

GORDIYEVSKIY, A.V.; FILIPPOV, E.L.; SHTERMAN, V.S.; TRIZNO, V.V.

Potentiometric titration in anhydrous acetic acid by means of
an ion-exchange membrane electrode. Zhur. anal. khim. 20 no. 11:
1164-1168 '65 (MIRA 19:1)

I. Moskovskiy khimiko-tehnologicheskiy institut imeni
D.I. Mendeleyeva. Submitted June 15, 1964.

ACCESSION NR: AP4013749

S/0197/63/000/012/0049/0056

AUTHORS: Tsinober, A.; Shtern, A.; Shcherbinin, E.

TITLE: On the separation of magnetohydrodynamic boundary layer

SOURCE: AN LatSSR. Izv., no. 12, 1963, 49-56

TOPIC TAGS: bismuth cylinder, transverse magnetic field, laminar boundary layer, Hartmann number, Stuart number

ABSTRACT: By means of tin and bismuth cylinders, coated with mercury, the effect of transverse magnetic field on the position of separation of the laminar boundary layer from the cylinder surface has been measured. The mercury channel width was 30 mm, and cylinder diameters ranged from 5 to 8.5 mm. The angles at which separation took place were measured for various Reynolds and Hartmann numbers.

Data were correlated, using the Stuart number M^2/Re . The effect of cylinder conductivity on separation distance was also studied. For tin, ϑ/ϑ_0 (separation angle ratio) was 1.75 at $M^2/Re \sim 1$ and for bismuth, at $M^2/Re \sim 1.7$. The unsteady magnetohydrodynamic equations in two dimensions were solved iteratively

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ACCESSION NR: AP4013749

for $Re_m \ll 1$, assuming no electric fields present and the separation criteria were obtained as

$$\left(\frac{M^2}{Re}\right) \sim \frac{\rho V_0^3}{L} \frac{L^2}{\eta V_0} \frac{1}{Re} = 1,$$

in good agreement with experiments. Orig. art. has: 23 formulas, 3 figures, and 1 table.

ASSOCIATION: Institut fiziki AN Latv. SSR (Institute of Physics AN Latv. SSR)

SUBMITTED: 08Aug63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: PH

NO REF Sov: 005

OTHER: 001

Card 2/2

LIYELAUSIS, O. [Lielausis, O.]; TSINOBER, A. [Cinobers, A.];
SHTERN, A. [Sterns, A.]

Effect of a transverse magnetic field on the nature of the
flow of liquid metal about bodies. Izv. AN Latv. SSR no.5:
(MIRA 17:1)
73-76 '63.

SECRET//A.A.

Organization of multiple assortment footwear production in the
"Progress" Firm in Lvov. Kozh.-obuv.prom. 6 no.3:10-12 Mr '64.
(MIRA 17:4)

SHTERN, A.A.

Heading the technical development. NTO 2 no.4:28 Ap '60.
(MIRA 13:6)

1. Predsedatel' soveta Nauchno-tehnicheskogo obshchestva
Lvovskoy obuvnoy fabriki.
(Lvov—Shoe industry—Technological innovations)

SHTERN, A.A., inzh.; SHIFRIN, I.A., starshiy inzh.

For a further specialization in shoe manufacture. Kozh.prom. 3
no.1:11-12 Ja '61. (MIRA 14:5)
(Shoe manufacture)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6

SHTERN, A.A., inzhener.

Production of powdered tomatoes in spray driers. Trudy VNIIKOP
no.6:135-150 '56. (MLRA 10:5)
(Tomatoes--Drying)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6"

SHTERN, A. A. Cand Tech Sci -- (diss) "Study of the ^{commercial} ~~marketable~~ qualities and conditions of manufacture and storage of spray-dried powdered tomato." Mos, 1959. 20 pp (Mos Order of Labor Red Banner Inst of National Economy im G. V. Plekhanov), 150 copies (KL, 45-59, 147)

-61-

SHTERN, A.A.

Manufacture of high quality footwear under mass production conditions. Kozh.-obuv.prom. 4 no.4:4-5 Ap '62. (MIRA 15:5)
(Shoe manufacture)

SHTERN, A.A.; SHIFRIN, I.A., inzh.

The first Soviet consolidated enterprise. Kozh.-obuv.prom. 4
no.2:11-14 F '62. (MIRA 15:4)

1. Glavnnyy inzhener firmy "Progress".
(Shoe industry)

SHTERN, A.A.; SHIFRIN, Y.A. [Shyfrin, I.A.], inzh.

First Soviet firm. Leh.prom. no.1:6-9 Ja-Mr '62. (MIRA 15:9)

1. L'vovskaya obuvnaya firma "Progres". 2. Glavnnyy inzh.

L'vovskoy obuvnoy firmy "Progres" (for Shtern).

(Lvov economic region--Shoe industry) (Industrial organization)

TRAKHTENBERG, S.I.; SHUTER, L.M.; STEPANCHENKO, N.A. [Stepanchenko, M.A.]
SHTERN, A.A.; ZHURAVSKIY, V.A. [Zhurav's'kyi, V.A.]; KAPLAN, K.L.

Preparation of the modified MBK-258 casein and its use in the
treatment of chrome leather.. Leh. prom. no.1:46-48 Ja-Mr '65.
(MIRA 18:4)

I 41777-65 EWT(1)/EWP(m)/EWA(d)/EPR/FCS(k)/EWA(l) Pd-1/P1-4 4W
ACCESSION NR: AP5005771 S/0170/65/008/001/0121/0123

AUTHOR: Tainober, A. B., Shtern, A. G.; Shcherbinin, E. V.

TITLE: Effect of the Reynolds number on the position of the point of detachment of the boundary layer

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 8, no. 1, 1965, 121-123

TOPIC TAGS: laminar flow, boundary layer, boundary layer detachment, Reynolds number

ABSTRACT: It is shown first that the concept of the boundary layer implies in itself a large Reynolds number, and that so far there have been no published data on systematic measurements in the range of smaller Reynolds numbers ($3 \times 10^2 - 10^4$) although such information would be of interest in connection with problems of measuring techniques, ore enrichment, and heterogeneous physicochemical processes. The authors have therefore measured the point of detachment of a laminar boundary layer on the surface of a cylinder in the Reynolds number interval from 4.6×10^2 to 6×10^3 . The experiments were made with tin and lead cylinders, of diameters

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L 41777-65
ACCESSION NR: AP5005771

from 0.2 to 0.5 cm, immersed to a depth of 5.5 cm in a rotating annular channel of average diameter 50 cm, and of 3 x 6 cm rectangular cross section. The rotation of the channel was regulated so that the speed of the mercury varied from 2.7 to 18.7 cm/sec. The cylinders were coated with amalgam prior to immersion, and dissolution of the amalgam in the liquid displayed the boundary between the laminar and vortical dissolution regions, corresponding to the detachment of the laminar boundary layer. Typical results are shown in Fig. 1 of the Enclosure. The possible experimental errors and the causes of disparity with results by others are briefly discussed. Orig. art. has: 1 figure.

ASSOCIATION: Institut fiziki AN Latviyskoy SSR, Riga (Institute of Physics, AN Latvian SSR)

SUBMITTED: 22Oct63

ENCL: 01

SUB CODE: ME

MR REF Sov: 001

OTHER: 005

Card 2/3

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6

KALIS, KH.E.; LIELAUSIS, G.A.; TSINOBER, A.B.; SHAFERN, A.G.; SHCHERBININ, E.V.

(Riga)

"Conductive fluid flow past bodies in a transverse magnetic field"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6"

41404-65
EPA(m)-2/EWP(m)/EPF(n)-2/EPR/EPA(s)-2/ENG(v)/EPA(w)-2/EWT(1)/EWT(m)/EPA(bb)-2/
-2/EWP(b)/EPA(sp)-2/EWP(t) Pd-1/Pe-5/Pt-4/Ps-4/Pt-10/Pu-4/Pab-10 IJP(c) WW/
ACCESSION NR: AR5009688 ID/JG UR/0058/65/000/002/002/0002

SOURCE: Ref. zh. Fizika, Akad. 2010

J.6
B

AUTHORS: Tsinober, A. B.; Sintern, A. G.; Shcherbinin, E. V.

TITLE: Flow of a conducting liquid around a body in a magnetic field

CITED SOURCE: Izv. AN Latv SSR. Ser. Fiz. i tekhn. n., no. 4, 1964, 31-40

TOPIC TAGS: magnetohydrodynamics, mhd flow, pressure dependence, magnetic field dependence, flow resistance

TRANSLATION: Experiments are described devoted to the study of the influence of a magnetic field on the resistance when mercury flows around a conducting body. It is established that, in the presence of good electric contact between the mercury and the body, the resistance of the body increases with increase of its electric conductivity. The influence of the magnetic field on the distribution of the pressure on a round cylinder was investigated. It is shown that when a magnetic field is applied the pressure in the frontal part of the cylinder in-

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L 41404-65

ACCESSION NR: AR5009688

creases, so that the pressure coefficient in the forward critical point becomes larger than unity. In the rear part of the cylinder the pressure decreases. The increase in the resistance due to the change in the pressure amounts to 40-50% of the increase in the total resistance.

SUB COME: ME

ENCL: 00

Card CC
2/2

L.47379-65 EWG(j)/EWT(1)/EWP(m)/EWT(m)/EWP(i)/EPF(c)/EWP(e)/EPR/FCS(k)/EWP(b)/
EVA(1)/EWA(d) Pd-1/Pr-4/Ps-4 WW/GS/WH

ACCESSION NR: AT5009761 UR/0000/64/004/000/0129/0132

44

B+/

AUTHOR: Tsinober, A. B.; Stern, A. G.; Shcherbinin, E. V.

TITLE: Flow in the trail of a cylinder within a transverse magnetic field

SOURCE: Soyeshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike.
3d. Riga, 1962. Voprosy magnitnoy hidrodinamiki (Problems in magnetic hydro-
dynamics); doklady soveshchaniya, v. 4. Riga, Izd-vo AN LatSSR, 1964, 129-132

TOPIC TAGS: Karman trail, magnetohydrodynamic flow, transverse magnetic field,
hydrodynamics, mercury flow

ABSTRACT: According to hydrodynamic theories, at Re numbers exceeding a certain
value (~45 for a circular cylinder), the flow within the track of an object
moving through a fluid medium becomes stationary and one observes a Karman trail.
The present authors studied the above effects experimentally by photographing
the surface of free mercury during its flow around a circular cylinder 1 cm in
diameter and made of organic glass. The flow was made observable by a thin layer
of soft graphite powder covered by a thin solution of nitric acid. The meniscus
was removed by means of a copper annulus mounted on the upper base of the cylin-

Cord 1/2

L 47379-65	
ACCESSION NR: AT5009761	
der and submerged into the solution so that the upper edge of the ring was at the same level as the mercury. Experiments were carried out within the ring-shaped magnetohydrodynamic channel described earlier (G. G. Branover, I. M. Kirko, O. A. Liyelausis, Priladnaya magnitogidrodinamika, Trudy Instituta fiziki AN Latv. SSR, 12, 1961, 167). The article presents the photographs taken and discusses the pattern transformations as a function of the Reynolds and Stuart numbers and the magnetic field intensity. Orig. art. has: 2 figures.	
ASSOCIATION: None	
S JEMITTED: 11Aug64	ENCL: 00
N ^o REF SOV: 007	OTHER: 001
TP Card 2/2	SUB CODE: ME, EM

57473-63 EWI(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1) Pd-1

ACCESSION NR: AF5014171

UR/0362/65/000/001/0018/0028 32

538.4:532.526

B

AUTHOR: Kalis, Kh. E.; Tsincher, A. B.; Shtern, A. G.; Shcherbinin, E. V.TITLE: Flow of electrically conducting fluid in a transverse magnetic field around a circular cylinderSOURCE: Magnitnaya gidrodinamika, no. 1, 1965, 18-28TOPIC TAGS: magnetohydrodynamics, plasma flow, Navier-Stokes equation, Reynolds number

ABSTRACT: The Navier-Stokes equations for the flow of a viscous conducting fluid past an insulated cylinder are solved for the case of a transverse magnetic field with the Reynolds number of 40; the results are compared with an experiment (of higher Reynolds number). The exact problem is written out as a set of difference equations and solved for several values of the magnetic coupling parameter H . The results are represented by a plot of streamlines and qualitatively compared with photographs from the experiment. Also velocity distribution, pressure and other results for various Stuart numbers are plotted and discussed. The method of solution

Card 1/2

L 57473-65

ACCESSION NR: AP5014171

avoids oscillation of the stream function as in the work of M. Kawaguti (Journ. Phys. Soc. Japan, 1953, 8, 6). Orig. art. has: 11 formulas, 8 figures.

ASSOCIATION: none

SUBMITTED: 15Sep64

ENCL: 00

SUB CODE: ME, EH

NO REF Sov: 005

OTHER: 003

Card 2/2

ACC NR: A17005439

SOURCE CODE: UR/0382/66/000/002/0153/0155

AUTHOR: Shtern, A. G.; Shcherbinin, E. V.

ORG: none

TITLE: Development of a magnetohydrodynamic boundary layer on an accelerating body

SOURCE: Magnitnaya gidrodinamika, no. 2, 1966, 153-155

TOPIC TAGS: homogeneous magnetic field, magnetohydrodynamics, boundary layer problem

ABSTRACT: The development of a boundary layer is examined in a homogeneous, time-independent, magnetic field which has a component orthogonal to the surface of the body that is a function of the x component. The conditions under which boundary layer detachment can and cannot occur are established. Orig. art. has: 5 formulas. [JPRS: 38,764]

SUB CODE: 20 / SUBM DATE: 29Jan66 / ORIG REF: 003

Card 1/1

UDC: 538.4

SHTERN, A.I.

Totally irreducible representations of a real unimodular
second-order group. Dokl. AN SSSR 154 no.4:798-801 F '64.
(MIRA 17:3)

1. Moskovski.y gosudarstvennyy universitet im. M.V. Lomonosova.
Predstavлено akademikom L.S. Pontryaginym.

SHTERN, A.S., redaktor; KASSIL', G.N., redaktor

[Direct action on nerve centers] Neposredstvennoe vozdeistvie na
nervnye tsentry. Pod red. A.S.Shtern i G.N.Kassil'. Moskva, Izd.
Akademii Med. nauk SSSR, 1948. 313 p. (MIRA 9:7)

1. Moscow. Vtoroy Moskovskiy meditsinskiy institut.
(NERVOUS SYSTEM)

SHTERN, B.M., professor.

Roentgenologic observations of functional changes of the stomach in acute dysentery. Vest. rent. i rad. no.5:75-79 S-O '55.
(MLRA 9:1)

1. Iz kafedry rentgenologii (zav.--prof. B.M.Shtern)
Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta
(dir.--chlen-korrespondent Akademii meditsinskikh nauk SSSR
prof. D.A.Zhdanov)
(STOMACH, in various dis.
dysentery, causing funct. changes)
(DYSENTERY, manifest.
funct. changes of stomach)

Stern, B. M.

✓ Röntgenographic observations of action of vitamin B₁ in
hypomotor dyskinesia of small intestine. B. M. Stern
(Sanit. Hyg. Inst., Leningrad). *Vestn. Radiolog.*
Radiol. 31, No. 2, 02-6(1960).—X-ray observations indicate
that in a n. of cases the administration of vitamin B₁
improves the motor function of the small intestine.
G. M. Kosolapoff

Chair Radiology-

SHTERN, B.M., prof.

Work of the Leningrad Society of Roentgenologists and Radiologists
in 1957. Vestn. i rad. 33 no.4:87-89 J1-Ag '58 (MIRA 11:8)
(RADIOLOGY, MEDICAL SCIENCES)

SHTERN, B.M.
No. 431

834 Functional Alterations of the Gastro-Intestinal Tract under the Influence of Various Pharmacological Preparations in Radiography

FANARDZHIAN V.D. Merku (Sovietunion)
DANIELIAN G.A. Merku (Sovietunion)

Radiological observations of functional alterations of the gastrointestinal tract occurring under the influence of compounds such as morphine, atropine, pilocarpine, physostigmine, adrenaline and others, have already been published in the literature. Already in 1922 Sihler demonstrated radiographically the stimulating effect of small doses of morphine upon the musculature of the stomach. This publication reports on radiographical examination results in relation to the influence of various pharmacological substances on the function of the digestive tract. Catecholamine belongs to the group of the so-called diureticamines, which are secreted by the enteric nerves of the esophagus and rectum, as well as the H-chloride reabsorbing system. Experimental work shows that catecholamine represents an effective stimulant of the reflexes of respiration and acts on the chemoreceptors of the carotid bodies. Prostigmine is a synthetic substitute for physostigmine. As in the latter it possesses an anticholinesterase activity. Above all, prostigmine influences the M-choline receptor system and simultaneously stimulates the H-chloride reabsorbing system of the respiratory epithelia. Prostigmine is more stable than eserine (physostigmine), less toxic for the central nervous system and better tolerated in therapeutic doses. The preparations were used by us in healthy and sick persons, in various kinds of diseases of the digestive tract. Special attention was paid to the differentiation of organic damages in the stomach in correlation to pathological conditions of functional origin.

Morphine was administered to the patients either by subcutaneous injection of 1 ml of a 0.01% solution or orally as powder of 0.015 mg each. The alterations in the radiographic picture of the barium-filled stomach usually started 10-15 minutes after subcutaneous injection or 25-35 minutes after oral administration. The radiographically identifiable changes were of different duration. On the average they lasted for 60-80 minutes. There was a time correlation between the intensity and length of time from the intake of the drug.

The alterations of the gastro-intestinal tract caused by the action of prostigmine consist of:

1. Increased tone of the gastric musculature, which sometimes assumes impressive shapes
2. Increase of the gastric peristalsis

3. Accelerated evacuation of the barium in the stomach, which was observed in practically all cases, only where a definite carcinoma or ulcerous stenosis of the gastric exit was present; an identifiable difference in time concerning the evacuation of the barium could not be observed.

4. Strongly increased peristalsis of the duodenum (especially of the arched portion) and of the small intestine

5. Increased tone of the large bowel.

Catecholamine is used by us as a 10% solution of 0.3 to 0.5 ml. The effect upon the respiration is very soon seen after about 1-2 minutes, frequently even earlier. The respiration of the examinee is increased and becomes superficial up to 30-40 respirations per minute in addition an acceleration of the pulse was observed up to 100 per minute; the quality of the pulse was weak.

The described symptoms faded on an average for 10-15 minutes, their intensity remaining practically constant. Afterward the patient remained whilst accelerated respiration continued. The latter became normal again by step within 30-60 minutes. The effect of catecholamine upon the motoric function of the gastro-intestinal tract is generally analogous to the action of prostigmine.

Our examinations permit conclusions being drawn as to the usefulness of prostigmine and catecholamine in radiological practice regarding differential diagnostics in gastro-intestinal diseases.

292

Presented at the Ninth International Congress of Radiology, Munich, 23-30 July 1959.

Vn. 351-436

835 Roentgen-diagnostic Significance of Some Pharmacological Effects for Accurate Diagnosis of Gastric Disorders

STERN B.M. *SHTERN* Leningrad (Sovietunion)

1. Swelling of the gastric mucosa accompanying inflammatory disorders and tumors may frequently form a serious impediment to accurate diagnosis of the main disorder.

2. This induced the author to search for pharmacological effects capable of acting on the functional condition of the gastric mucosa and of contributing to the elimination or reduction of swelling.

3. The first results were obtained by preparing the patient by means of a mixture consisting of a weak pyramidaline solution with a small quantity of adrenaline. These two preparations contribute in a defined ratio to the reduction and elimination of swelling of the gastric mucosa. The mixture is taken by the patient according to a fixed schedule on the course of a week prior to X-ray examination.

4. Numerous observations established that in the presence of an inflammatory reaction of the gastric mucosa, one week after starting with the systematic ingestion of the above mentioned mixture the reduction of inflammatory changes in true gastritis, as well as in gastritis associated with ulcer, is clearly visible, thereby the visibility of the defect area.

5. In the presence of weak gastritis, however, even though the series of preparations do not always supply the material necessary for a plausible diagnosis, the reduction occurring at the gastric mucosa. In such cases the pharmacological effect of morphine is recommended. This pharmacological test supplies the prerequisites for a considerable increase in the value of serial exposures as a method for the detection of an infiltrative swelling in the so-called small form of gastric cancer.

6. A number of symptoms accompanying many gastric disorders can be eliminated in some cases with the aid of the pharmacological influence of phenamine (benzedrine) — in the absence of coca induction — This has a mild and sufficiently rapid spasmodolytic effect, enhancing the value of the X-ray examination.

7. The factors enumerated above as in pharmacological influence can facilitate the solution of a number of diagnostic problems and the accuracy of the main diagnosis, as well as to reduce the number of gastric disorders not recognizable by radiography.

836 Osteoporosis as a Sign of Osseous Dystrophy

SEIDENHOFER G.A. *ZEPPELIN* Merku (Sovietunion)

LINDNERBRATEN L.D. Merku (Sovietunion)

Osteoporosis develops by reflexory action and represents the result of deep-seated neurotropic disorders of the bone tissue. Experimental investigation by G. A. Seidenhofer and D. G. Kowalewski has demonstrated that even by a transient interruption of the afferent impulses by a novocain block the development of osteoporosis is suddenly arrested and its intensity diminished. Apart from a reduction in the total number of the bone lamellae, osteoporosis is also characterized by dystrophic changes in the bone tissue. The trabecular and spongy bone becomes thinner and sometimes deformed. The nuclei of the osteoblast cells situated in the laminae and trabeculae are subjected to degenerative changes and the myeloid bone marrow is transformed to fibrous interstitial marrow. The disintegration of the laminae and the structural changes occur according to biological laws and in the known sequence. Initially, those laminae disintegrate which do not bear the chief weight and are less important from the functional standpoint. The basal laminae, arranged according to lines of force and carrying a larger part of the functional burden, do not change but are in some cases reinforced, i.e., they thicken.

The radiographic method appears to be the only hopeful and objective means of recognizing osteoporosis in the living subject. The radiological detection of osteoporosis by means of the usual exposure, by exposures with direct enlargement, and tomography, the measurement of its extent, the degree and character, and its evolution, all have an important diagnostic and prognostic significance.

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SHTERN, B.M., prof.

"X-ray diagnosis of occupational diseases" by A.V. Grinberg. Re-
viewed by B.M. Shtern. Vest. rent. i rad. 34 no. 6P81-82 N-D '59.
(MIRA 13:5)
(OCCUPATIONAL DISEASES) (DIAGNOSIS, RADIOSCOPIC) (GRINBERG, A.V.)

SHTERN, B.M., prof.

Universal large-frame fluorograph and fields for its application.
Trudy LSGMI 53:7-23 59. (MIRA 13:10)

1. Kafedra rentgenologii s meditsinskoy radiologiyey Leningradskogo
sanitarno-gigienicheskogo meditsinskogo instituta (zav. kafedroy -
prof. B.M. Shtern).
(DIAGNOSIS, FLUOROSCOPIC EQUIPMENT AND SUPPLIES)

SHTERN, B.M.

Use of large-frame fluorography for radiosscopic diagnoses of
diseases. Trudy LSGMI 53:53-67 '59. (MIRA 13:10)

1. Kafedra rentgenologii s meditsinskoy radiologiyey Leningrad-
skogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav.
kafedroy - prof. B.M. Shtern).
(ALIMENTARY CANAL—DISEASES) (DIAGNOSIS, FLUOROSCOPIC)

SHTERN, B.M.

Basic problems in modern functional radiosscopic diagnosis of diseases of the gastrointestinal tract. Trudy LSGMI 53:111-128 '59. (MIRA 13:10)

1. Kafedra rentgenologii s meditsinskoy radiologiyey Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - prof. B.M. Shtern).
(GASTROINTESTINAL SYSTEM—DISEASES).
(DIAGNOSIS, RADIOSCOPIC)

SHTERN, B.M.; MAMONT, V.S.

Use of tomography for a functional evaluation of the lungs.
Trudy LSGMI 53:159-167 '59. (MIRA 13:10)

1. Kafedra rentgenologii s meditsinskoy radiologiyey Leningradskogo
sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy -
prof. B.M. Shtern). (LUNGS—RADIOGRAPHY)

ZEDGENIDZE, G.A., prof. otv. red.; BENTSIANOVA, V.M., dotsent, red.; VIKTURINA, V.P., kand. med. nauk, red.; ZUBCHUK, N.V., kand. med. nauk, red.; LAGUNOVA, I.G., prof., red.; POBEDINSKIY, M.N., prof., red.; REYNBERG, S.A., zasluzhennyy deyatel' nauki, prof., red.; ROZENSHTRAUKH, L.S., doktor med. nauk, red.; ROKHLIN, D.G., prof., red.; SOKOLOV, Yu.N., prof., red.; FANARDZHIAN, V.A., red.; SHEKHTER, I.A., prof., red.; SHTERN, B.M., prof.. red.: SHTERN, V.N.. prof., red.; ZUYEVA, N.K., tekhn. red.

[Transactions of the Seventh All-Union Congress of Roentgenologists and Radiologists] Trudy Vsesoiuznogo s"ezda rentgenologov i radiologov, 7th, Saratov, 1958. Moskva, Gos. izd-vo med. lit-ry Medgiz, 1961. 317 p.

(MIRA 14:7)

1. Vsesoyuznyy s"ezd rentgenologov i radiologov, 7th, Saratov, 1958.
2. Deystvite1'nyy chlen AMN SSSR (for Zedgenidze). 3. Chleny-korrespondenty AMN SSSR (for Rokhlin, Fanardzhyan). 4. Akademiya nauk Arzianskoy SSR (for Fanardzhyan)

(RADIOLOGY, MEDICAL)

SHTERN, B.M., prof. (Leningrad, D-194, ul.Kalyayeva, d.14, kv.33);
KOLEDINOV, V.I., kand.med.nauk

Study of the heart and lungs in those who work under compressed air
conditions by means of functional X-ray diagnosis. Vest. rent. i
rad. 36 no.5:22-26 S-0 '61. (MIRA 15:1)

1. Iz kafedry rentgenologii (zav. - prof. B.M.Shtern) Leningradskogo
sanitarno-gigienicheskogo meditsinskogo instituta (dir. - prof.
A.Ya.Ivanov). (COMPRESSED AIR PHYSIOLOGICAL EFFECT) (HEART RADIOGRAPHY)
(LUNGS RADIOGRAPHY)

SHTERN, B. M.

Experience with the use of single-stage splenoportography

Program for Medical Society of J. E. Purkyne, Czech.
Radiology Congress, Karlovy Vary, Czech. 10-15 June 63

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6

SECRET

Project Manager, Bureau of Economic Analysis, Department of Commerce
and Commerce Secretary, Bureau of Economic Analysis (BA) (BA:4)

Project Manager, Bureau of Economic Analysis, Department of Commerce
and Commerce Secretary, Bureau of Economic Analysis (BA) (BA:4)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6"

SHTERN, B.M., prof. (Leningrad)

Review of [prof.] V.G. Ginzburg's book "Fundamentals of roentgenological examination of the skull". Vest. rent. i rad. 38 no.5:73-74 S-0'63 (MIRA 16:12)

SHTERN, B.M.; USENKO, V.R.

X-ray data on osteoarticular changes in metal grinders.
Trudy LSGMI 75:57-61 '63. (MIRA 17:4)

1. Kafedra gigiyeny truda s klinikoy professional'nykh
zabolevaniy (zav. kafedroy - prof. Ye.TS. Andreyeva -
Galanina) i kafedra rentgenologii (zav. - prof. B.M. Shtern)
Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo in-
stituta.

SHTERN, B.M.

Results of splenoportography on a single film. Vest. rent. i rad.
39 no.5:44-47 S 0 '64. (MIRA 18:3)

I. Kafedra rentgenologii (zav. - prof. B.M. Shtern) Leningradskogo
sanitarno-gigiyenicheskogo meditsinskogo instituta.

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6

FNTARN, R.M., prof., SHFKHTER, I.A., prof., KAGAN, Ya.M., prof., NYMESH, V.V.

Brief news. Vest. rent. i rad. 40 no.4/74.77 J1-Ag 165.
(MIRA 18:9)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001550020002-6"

1. TSEYTLIN, A. YA., SHTERN, D. I., KONDRATOVA, E. G.
2. USSR (600)
4. Slag cement
7. Use of ferromanganese and specular cast-iron slags in the production of slag portland cement. TSement No. 2, 1952. Inzh.
9. Monthly List of Russian Accessions, Library of congress, August, 1952. Unclassified.

L 17838-65 EWT(1)/EEC(t) Feb IJP(c)/SSD(a)/AEDC(b) S/0030/64/000/011/0040/0043
ACCESSION NR: AP5000259

AUTHORS: Pavlov, B. N.; Safin, I. A.; Semin, G. K.; Fedin, E. I.; Shtern, D. Ya.

TITLE: Pulse method for investigating nuclear quadrupole resonance

SOURCE: AN SSSR. Vestnik, no. 11, 1964, 40-43

TOPIC TAGS: nuclear quadrupole resonance, spectrometer

ABSTRACT: The advantages of pulse methods for investigating nuclear quadrupole resonance (NQR) over steady-state methods are discussed. Steady-state methods can be used successfully only for samples with very perfect crystal structure. In these cases the equivalent Q of the line $Q_{eq} = \frac{v_0}{\Delta v} \sim 10^4$, where v_0 is the NQR frequency and Δv is the line width. Broadening of the NQR line, caused by disorder in the crystal structure which is often unremovable, leads not only to a decrease in signal amplitude but also to a decrease in sensitivity. The latter is caused by spurious effects with the strong modulations of frequency and magnetic field which are required. As a result, steady-state methods are useless when $Q_{eq} \leq 10^3$. However, the sensitivity of a pulse spectrometer remains practically

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L 17838-65

ACCESSION NR: AP5000259

constant with line width, since the initial amplitude of the nuclear induction signal and the maximum amplitude of the quadrupole spin echo signal are proportional to the integral NQR signal intensity and are only slightly dependent on the line width. It has been shown that the gain in sensitivity of the pulse method over the steady-state method is

$$4\pi \sqrt{\frac{T_1}{T_2} \frac{\Delta\nu_{ss}}{\Delta\nu_p} \frac{F_{ss}}{F_p}}$$

where T_1 is the spin-lattice relaxation time, T_2^* is the parameter of the NQR line width, $\Delta\nu_{ss}$ is the pass band of the steady-state spectrometer amplifier, $\Delta\nu_p$ is the pass band of the pulse spectrometer receiver, and F_{ss} and F_p are the respective receiver noise factors. As an example of the gain in sensitivity, the quadrupole echo signal from the As^{75} nuclei in As_2S_3 is shown. This signal is unobserved when using the steady-state method. Several examples are also given which show that frequency measurements and resolution using the pulse spectrometer are as good as those obtained by using the steady-state spectrometer. Orig. art. has: 4 equations and 1 diagram.

Card 2/3

L 17838-65
ACCESSION NR: AP5000259

ASSOCIATION: Institut radioelektroniki, Kazanskiy fiziko-tehnicheskiy institut
(Radioelectronics Institute, Kazan Institute of Physics and Technology); Institut
elementoorganicheskikh soyedineniy, Akademii nauk SSSR (Institute of Organic
Compounds, Academy of Sciences SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: NP, SS

NO REF SOV: 000

OTHER: 000

Card 3/3

SAFIN, I.A.; PAVLOV, B.N.; SHTERN, D. Ya.

Steady-state and pulse methods of studying the nuclear quadrupole resonance. Zav. lab. 30 no.6:676-684 '64 (MTR 17:8)

SHTERN, G. M. Engr, Moscow

USSR/Electricity - Motors, Induction

Jun 51

"The Double Squirrel-Cage Induction Motor," G. M.
Shtern, Engr, Moscow

"Elektrichestvo" No 6, pp 21-25

Suggest a new modification of a double squirrel-cage induction motor. Theoretical calcns and test result show that this motor satisfies the tech requirements of the Min of Elec Ind USSR for a motor with high torque and slip. Its power factor and efficiency product is approximately that of std motors. Submitted 5 May 50.

200T11

REF ID: A111
Electrical Engineering Abst.
Vol. 57 No. 675
Mar. 1954
Electrical Engineering

621.313.333 : 621.3.012.2
877. Circle diagram of an induction motor with double rings on the rotor. G. M. SITERN. Elektrichesvo, 1953, No. 6, 51-6. In Russian.

The known types of squirrel-cage motors belong to one of three classes, namely those with normal and increased starting torque, and those with increased slip. None of these types may be regarded as fully satisfactory because either the starting or normal operating characteristics are below the possible optimum. For increasing the starting torque, either slip, or starting current or skin-effect must be increased, the first measure increasing the losses and thus reducing the efficiency, the second being undesirable for reasons connected with the supply system and the third, obtained by deepening the slots, increases the leakage which impairs the p.f. The author's design of a double-ring rotor simultaneously improves starting and normal operating characteristics, as is proved by the detailed theory of the motor presented. This also points out other advantages such as the improved ventilation obtained by cooling fins cast together with the rotor (which partly consists of aluminium). Comparison with the conventional types is made with reference to the corresponding equivalent circuits and circle diagrams.

B. F. KRAUS

SHTERN, G.M.

USSR/ Engineering - Electric motors

Card 1/1 : Pub. 128 - 11/31

Author : Shtern, G. M.

Title : Liquid-cooled electric motors

Periodical : Vest. mash. 10, 52 - 54, Oct 54

Abstract : The application, structure and operation of liquid-cooled electric motors is discussed, and technical data is given on their specifications and performance. Two USSR references (1949). Tables; graph; drawings.

Institution :

Submitted :

KOBZEV, V.A.; TAKIBAYEV, Zh.S.; SHALAGINA, Ye.V.; SHTERN, G.R.

Analysis of high-energy helium isotopes emitted in the interaction of protons with photoemulsion nuclei. Trudy Inst. iad. fiz. AN Kazakh. SSR 6:133-139 '63. (MIRA 16:10)

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ORG: Kazakh State University (Kazakhskiy gosudarstvennyy universitet)

TITLE: Investigation of disintegration with emission of fast He nuclei due to high-energy protons

SOURCE: Yadernaya fizika, v. 3, no. 5, 1966, 849-857

TOPIC TAGS: nuclear emulsion, angular distribution, proton

ABSTRACT: The emission of helium nuclei with kinetic energies in the 100-2500 MeV region by stars produced by 10-20 GeV protons in photoemulsion is investigated. It is shown that ~98% of the double-charged particles are emitted in the disintegration of heavy photoemulsion nuclei. It is noted that the cross-section of the investigated particles and their energy and angular distributions do not depend on the incident proton energy. The average numbers of thin, gray, and black tracks are compared in stars with and without helium, and the angular distributions of thin, gray, and black tracks in these interactions are obtained. The conclusion is made that the emission of fast helium nuclei is connected with a cascade process inside the nucleus. Orig. art. has: 5 figures, 2 formulas and 5 tables. [Based on authors' Eng. abst.]
[JPRS: 36,712]

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SHTERN, I. A.

PA 34/49T2

USSR/Medicine - Infants, Newborn, May/Jun 48
Diseases
Medicine - Puerperal Sepsis

"Etiology, Clinical Examination, Therapy and
Prophylaxis of Puerperal Sepsis of Newborn Babies;
I. A. Shtern, Moscow Oblast Child Clinic, Sci
Res Inst of Obstetrics and Gynecol, 5 pp

"Akusher i Ginekol" No 3

Lists main points to note in connection with
above subjects.

34/49T2

SHTERN, I.A.

[Care and feeding of new-born children] Ukhod za novorozhdennym
rebenkom i ego vskarmливанием. Moskva, Inst sanitarnogo prosve-
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(Infants--Care and hygiene)

SHTERN, I.A.

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1. Professor, Honored Physician RSFSR. 2. Moscow.

SHTERN, I.A.

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SHTERN, I.A., professor; KOROLEVA, A.M., kandidat meditsinskikh nauk

Features of the development of hemolysis in newborn infants. Vop.
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1. Iz Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta
akusherstva i ginekologii (glid.-zasluzhennyj vrach RSFSR O.D.
Matspanova, nauchnyj rukovoditel' - prof. V.P.Mikhaylov)
(INFANTS (NEWBORN)--DISEASES)
(HEMOLYSIS AND HEMOLYSINS)

SHTERN, I.A., professor

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(ASPHYXIA NEONATORUM, compl.
cerebral hemorrh., prev. & ther.)

(FETUS, dis.
asphyxia & cerebral hemorrh., prev. & ther.)

(ASPHYXIA, prev. & control
fetal)

SHTARN, I.A., professor; KOROLEVA, A.M., kandidat meditsinskikh nauk.

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Tenth All-Union Congress of Obstetricians and Gynecologists.
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(GYNECOLOGY--CONGRESSES)

(MIRA 11:6)

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kand.med.nauk

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